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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,733	04/18/2005	Jonathon L Napper	NPW009USNP	2306
24011 7590 05/21/2007 SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA			EXAMINER AKHAVANNIK, HADI	
			ART UNIT 2624	PAPER NUMBER
			MAIL DATE 05/21/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/531,733

Applicant(s)

NAPPER ET AL.

Examiner

Hadi Akhavannik

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/18/05</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. Claim 16 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim 16 should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claims 1-15 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 1-15 of copending Application No. 10683040 (PG PUB 2004/0105584). This is a provisional double patenting rejection since the conflicting claims have not in fact been patented. In this case the claims are identical.

Please note that claim 16 is also identical, however because it cannot be further treated on its merits, it is not rejected.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-7, 9-12, and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Ikebata (6226404).

Regarding claim 1, Ikebata discloses a method of estimating the orientation of a segment of digital ink, the method including the steps of: (1) measuring the azimuth of the pen at a sampling rate during writer generation of the segment of digital ink (see figure 1 item 2, column 4 lines 19-28 discloses sampling rates, and column 3 lines 35-41 discloses calculating the slant angle or azimuth of the pen);

and (2) estimating the orientation of the segment of digital ink using the measured azimuth of the pen at sampled points (by calculating the slant angle the direction of the character is also calculated as disclosed in column 4 line 59 to column 5 line 4. Also, see figures 8-9 as it discloses correcting the orientation of a segment of digital ink).

Regarding claim 2, Ikebata discloses that the estimated orientation of the segment of digital ink is subsequently used in a digital ink line orientation normalization technique (column 5 lines 1-4 discloses normalizing the slant angle so as to correct the orientation. This is also shown in figures 8-9).

Regarding claim 3, Ikebata discloses that a single, fixed orientation estimation is utilised for a line of digital ink (column 4 lines 40-63 discloses that a standard slant

angle may be used. This standard slant angle is computed from the training data and this will act as a fixed estimation).

Regarding claim 4, Ikebata discloses that the orientation estimation that varies across a line of digital ink is utilized (in order to modify the standard angle disclosed in the rejection of claim 3, Ikebata also discloses calculating the average slant angle. In column 4 lines 40-50 and column 6- lines 7-44 he discloses calculating the average slant pattern. Therefore, in order to calculate the orientation using the average slant angle, the system must calculate the varying angle across the digital ink).

Regarding claim 5, Ikebata discloses that the orientation of the pen at sampled points is estimated by subtracting the mean azimuth of a digital ink training sample from the measured azimuth of the sampled points, and normalizing the estimated orientation to be within the range of 0.degree. to 360.degree (Column 5 lines 59-65 discloses a slant compensation method that normalizes the digital ink by subtracting the standard slant angle, which is the average slant angle of the user, by the current angle. Column 6 discloses that the angles are between 0 and 360).

Regarding claim 6, column 6 lines 55-59 discloses that the slant angle is can be calculated for each of the input characters. This means that that the system can function for many characters.

Regarding claim 7, the examiner notes that one character can be read to be a line segment. Therefore the rejection of claim 6 discloses all aspects of claim 7.

Regarding claim 9, Ikebata discloses that the orientation estimation uses a writer independent handwriting model (column 5 lines 30-33 discloses that the system can use

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data from a user group or user. The user group may include as a group of left handed or right handed people.)

Regarding claim 10, Ikebata disclose that the orientation estimation uses a writer dependent handwriting model trained using sample digital ink input by the writer (column 5 line 66 to column 6 line 6 disclose learning the users writing style to create the standard slant angle).

Regarding claim 11, the figures 8-9 disclose that a consistent baseline is used to calculate the standard angle as a character is placed back on the X axis.

Regarding claim 12, Ikebata does not disclose that the input data needs to have specific characteristics, therefore, the examiner believes that the data is arbitrary.

Regarding claims 14-15, the rejection of claims 1-5 discloses all aspects of claims 14-15 and further not that Ikebata also discloses a system in column 3 lines 29-45.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Ikebata in view of Parthasarathy et al. (5740273, referred to as "Parthasarathy" herein).

Regarding claim 8, Ikebata discloses all aspects of claim 8 except for segmenting based on azimuth values.

Parthasarathy discloses that the line segmentation is performed by measuring a change in azimuth value (see figure 1 item 110 and column 3 lines 25-35 discloses segmenting points based on angle changes).

It would have been obvious at the time of the invention to one of ordinary skill in the art to include in Ikebata the segmenting means as taught by Parthasarathy. The reason for the combination is because it makes for a more robust system that can find character changes by looking for extreme angle changes.

5. Claim 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Ikebata in view of Fox et al. (4727588, referred to as "Fox" herein).

Ikebata discloses all aspects of claim 13 except for curve fitting or smoothed running estimate.

Fox discloses that curve fitting method may be used for orientation normalization (see column 9 line 61 to column 10 line 16 as it discloses using curve fitting for slant correction).

It would have been obvious at the time of the invention to one of ordinary skill in the art to include in Ikebata a curve fitting method as taught by Fox. The reason for the combination is because it makes for a more robust system that can use more advanced methods to normalize the orientation of characters. Further, column 6 line 64 to column 7 line 11 discloses that more advanced methods may be used for normalization.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gierhart et al. (5730602) discloses a slant correction education tool.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hadi Akhavannik whose telephone number is 571-272-8622. The examiner can normally be reached on 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on (571)272-7695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JOSEPH MANCUSO
SUPERVISORY PATENT EXAMINER